

PanTilt MY Series
VIDEO-MONITOR, single entry

Models:

MY-CU
MYH-CU

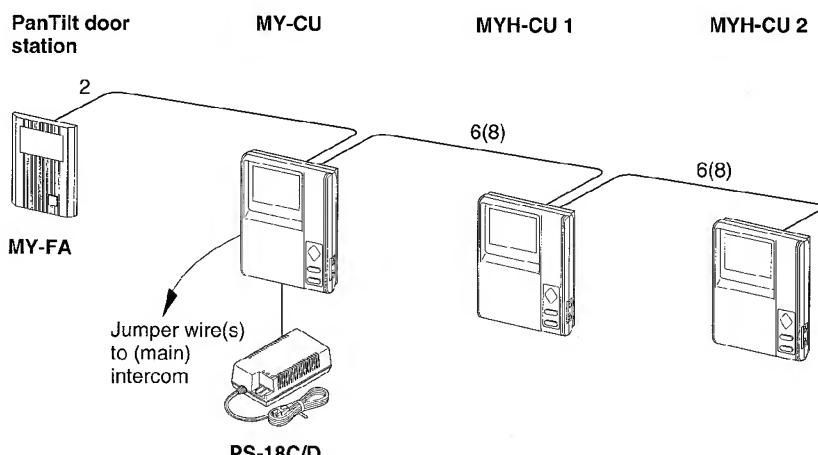
INSTALLATION & OPERATION MANUAL

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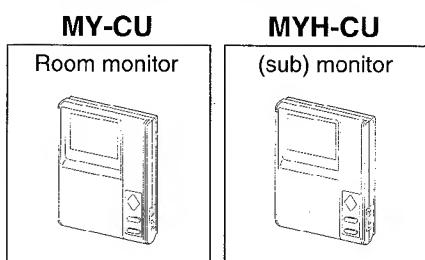
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1 SYSTEM OUTLINE & COMPONENTS

MY-CU is a video monitor unit to enable an intercom to verify callers at a single PanTilt entry.
MYH-CU is a sub-monitor, to increase monitor location.



■ Components available



Identically designed with Pan/tilt control pad.

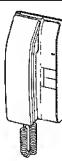
★ Prerun 8-conductor cable to extend distance to MYH-CU 2. (See page 12)

■ Package contents

- Video-monitor (MY-CU or MYH-CU)
- Mounting template
- Packet of screws
- Installation & Operation Manual

Intercom combinable

- Chime tone intercoms

IE-1GD(U)	IE-2AD(U)	IE-8MD
		

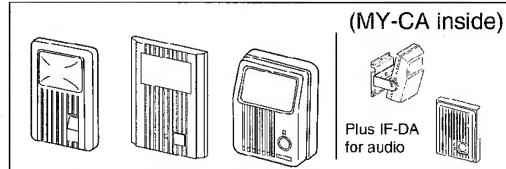
1 door, 3 calls

2 door, 3 calls

2 door, 6 calls

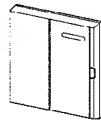
- PanTilt door station

MY-DC MY-FA MY-CA MYW-CA



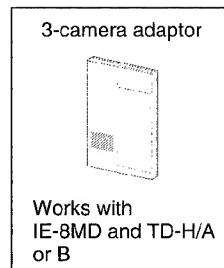
Other MY Series: MY-DG, MY-EA. Wide-angle MY-DS.

- Selective call intercoms

	LEF
	
	1~3 doors, 5, 10 calls
DE-UR	
	
For each door	
	MYW-P1L MYW-P3L
	
	1-camera
	
	3-camera

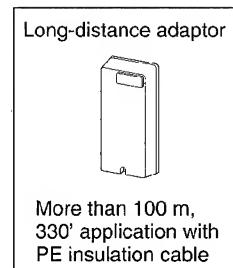
- Expanded system

MYW-P3CB



3-camera adaptor

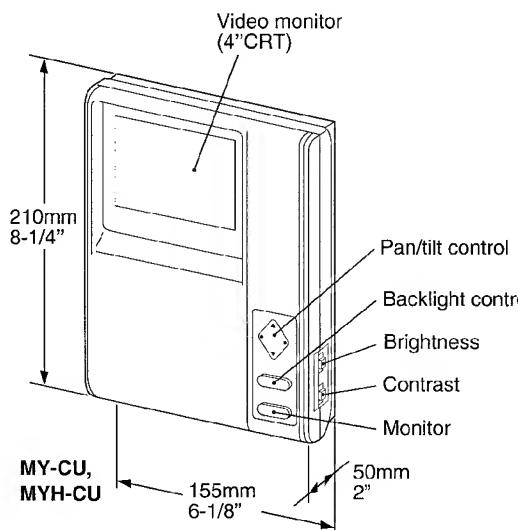
MYW-BA



Long-distance adaptor

★ Also, refer to the Manuals of using intercom and adaptor.

2 NAMES AND FEATURES



Unitized design enables wall-mounting attachedly to either side of intercom, or separately.

■ Features

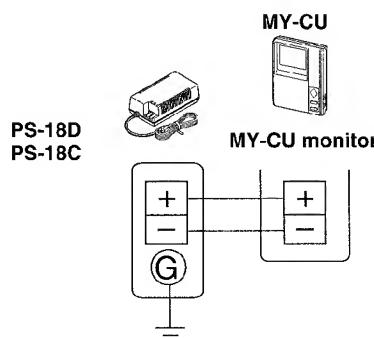
- * One PanTilt door system
- * One to 3 room monitors, expandable
- * Any monitor equipped with Pan/tilt, Backlight and Monitor buttons
- * Monitor button sees image handsfree, or extends viewing
- * Separate brightness & contrast adjusting

3 PRECAUTIONS ON INSTALLATION & WIRING

⚠ CAUTION

- ★ Do not connect any terminal on any unit to AC power lines to prevent fire or unit damage.
- ★ High voltage is present on the monitor unit inside.
Do not open MY-CU/MYH-CU without first unplugging the power supply, to prevent electric shock.
- ★ Do not attempt to install or connect wires on MY-CU equipment while system's power supply is plugged in.
- ★ MY-CU and related equipment, except door station, are designed for indoor use only. Do not install outdoors.
- ★ Do not connect any other power source than specified on terminals +, - . Doing so can damage the MY-CU equipment.
- ★ For system's installation, there is no need to disassemble the equipment. Do not open any MY-CU system components unless properly qualified.
- ★ Any other manufacturer's products installed with this system (door release, external signalling device, etc.) are not covered under Aiphone's warranty.
- ★ Do not mount MY-CU equipment in the following places, as it may cause the system to malfunction:
 - High or extreme cold temperature areas: under direct sunlight, near equipment that varies in temperature, in front of air-conditioner, inside a refrigerated area, etc.
 - Places subject to moisture or humidity extremes.
 - Places subject to environmental conditions, such as dust, oil, chemicals, etc.
- ★ MY-CU is an electrical device, which must not be subjected to water, or any other liquid.
- ★ Weather conditions, such as lightning storms, may cause damage to MY-CU equipment. We recommend that power surge protection be installed as follows: (However, this does not guarantee that no damage will occur).

If the power supply has a GROUND terminal, take it to an earth ground. In this case, a separate surge arrester is not necessary.



- Before actually installing the MY-CU system, the contents on pages 4 ~ 10 must be thoroughly read and understood.

4 WIRING

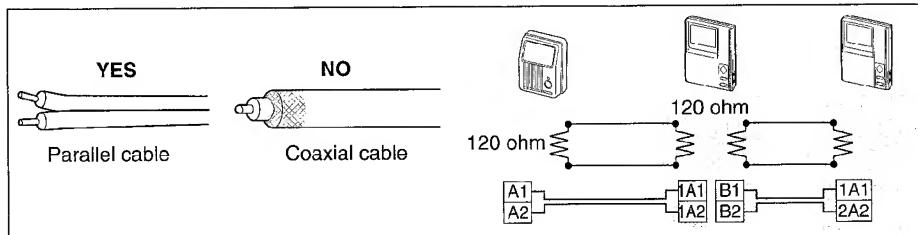
■ Single-entry, multiple-monitor system

MY-CU is capable of connecting one PanTilt door station and two additional MYH-CU sub monitors.

It can be further expanded with an additional MYH-CU('s), by locating a power supply(ies) for every 4 MYH-CU('s) (total 10 monitors).

■ Cable requirements

PanTilt door station Use a single pair (parallel) cable. Coaxial cable or 2 separate wires can not be used. When existing doorbell or chime wires must be used, locate and disconnect the bell transformer from the wires. Extra pair(s) in the installed cable to video door station can affect the image quality, and must be terminated with a 120 ohm resistor at each end of wires on both video door station and video monitor(s).

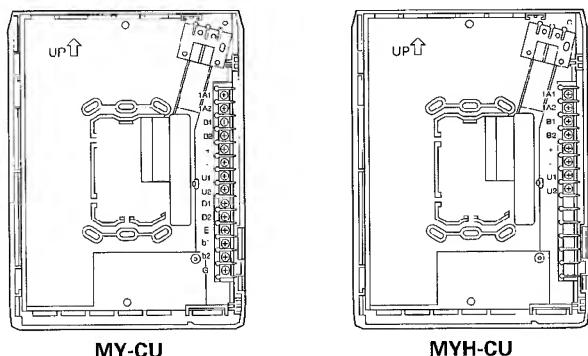


Room monitors

Use 6-conductor (parallel) cable, 0.65 ~ 1.0 mm dia., 22 ~ 18AWG. The video cable must be separately sheathed from intercom's (any), running from monitor to monitor without any reconnections on other junction. Max. 75 m, 250' is allowed from MY-CU to farthest MYH-CU in any configuration with 1.0 mm dia., 18AWG. When locating a third monitor (MYH-CU) up to 75 m, 250' away, 8-conductor cable must be run monitor to monitor, as each +, - wire has to be doubled.

★ For proper operations, MYH-CU must be fed 15.5V ~ 19.1V.

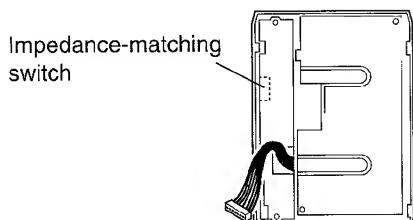
■ Terminal block layout



Meaning of terminal symbols

1A1, 1A2	: For video & audio signals
B1, B2	: For video output
+, -	: For power supply
U1	: For output control
U2	: For input control
D1	: For audio signal & image on
D2	: For detecting calling at IF-DA & image off
E	: For common line
G	: Grounding

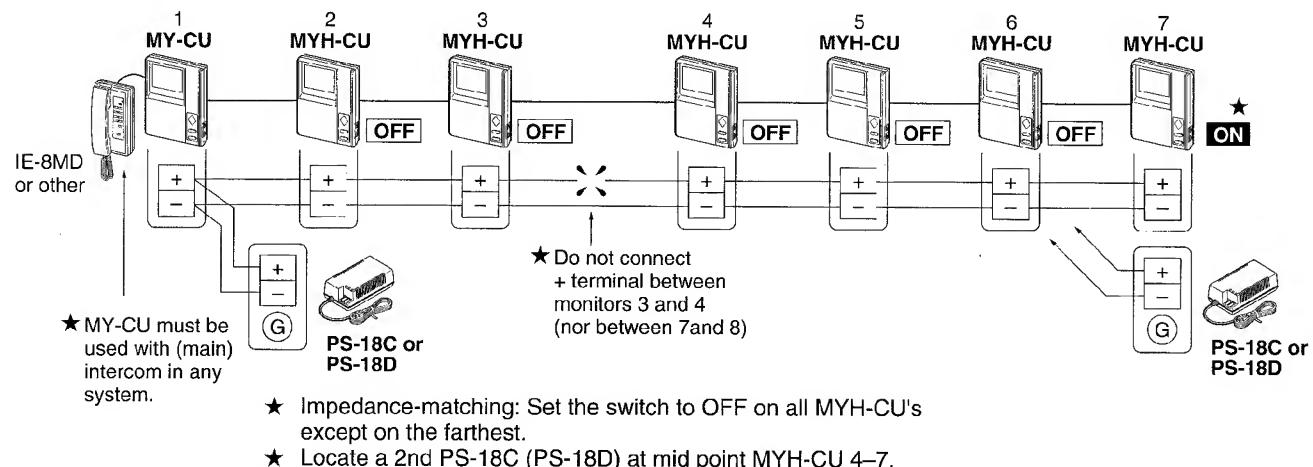
■ Impedance-matching



When MY-CU has an MYH-CU sub-monitor(s), locate a switch to lower OFF on all MYH-CU(s), while the initial ON may remain unchanged on the last MYH-CU to terminate.

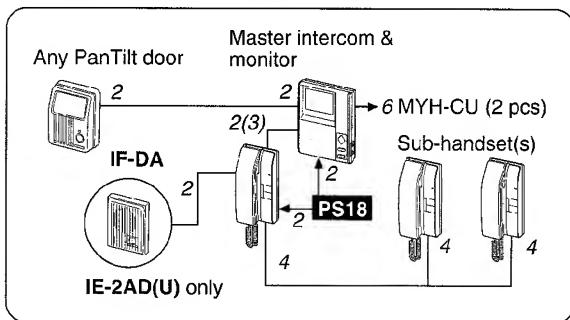
■ Power supply

Use a PS-18D (PS-18C in North America) power supply(ies) to power entire MY-CU system. Do not intermixedly use other manufacturer's.



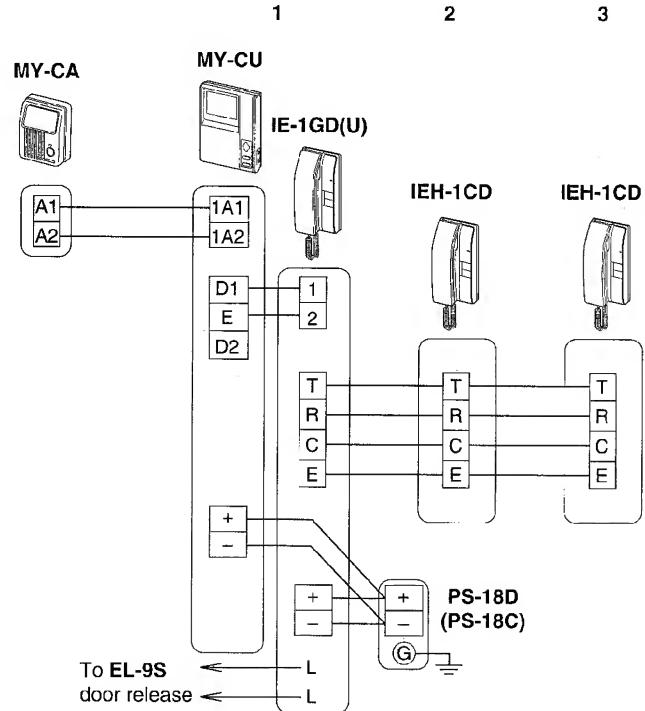
■ WIRING DIAGRAM

IE-IGD(U) with an MY-CU monitor



PanTilt MY-CA mounts in place of an IF-DA. Connect MY-CA and MY-CU with the (installed) 2 wires. Uses a PS-18D(PS-18C) power supply only.

IE-2AD(U) can connect a 2nd audio door on D2, E2 terminals. Add a jumper between D2 – D2 of IE-2AD(U)/MY-CU.



■ Wiring distance

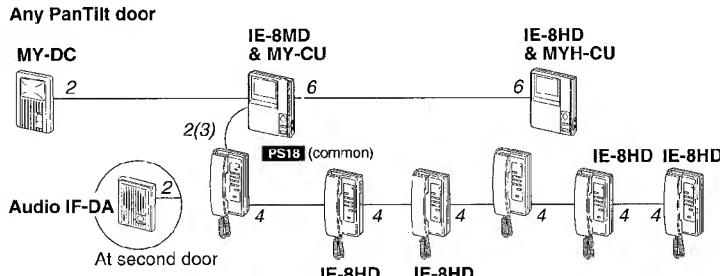
• MY-CU to PanTilt door

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	70m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	230'	330'

• Two farthest stations (any pair)

Diameter	0.65mm	0.8mm	1.0mm
Distance	75m	120m	190m
AWG	22AWG	20AWG	18AWG
Distance	250'	380'	630'

■ PanTilt IE-8MD with 2 video-monitors



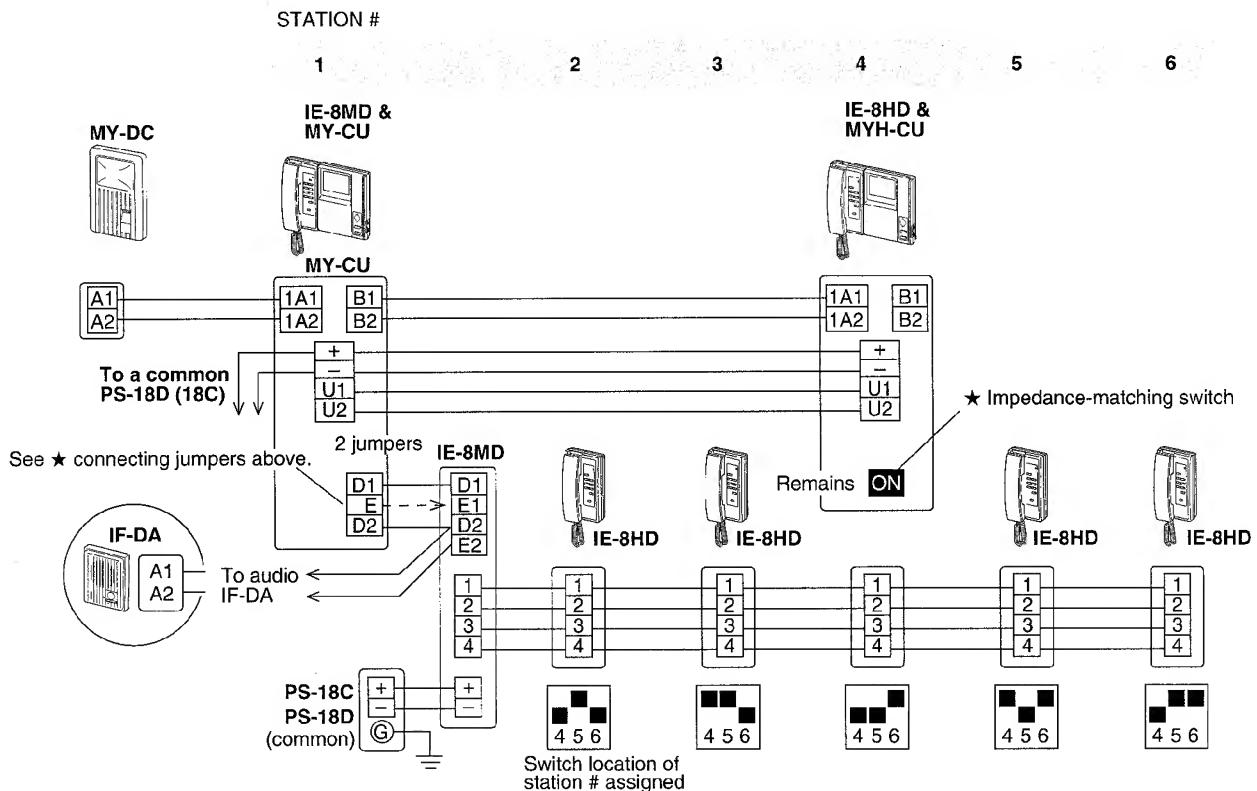
Single PS-18C or PS-18D powers both IE-8MD and MY-CU, locating an MYH-CU on 75m, 245'.

One to 5 IE-8HD with 4-wire cable, station-to-station. PanTilt MY-CU monitor with 6-wire cable separately sheathed. PanTilt door requires 2 parallel wires, connected directly to MY-CU monitor.

★ Connecting jumpers

In single PS-18C(D) sourced system, a D1 – D1 jumper is only required. Add another D2 – D2 when IF-DA is installed.

Install a third jumper on E – E1, when a separate audio & video power source is used.



■ Wiring distance

- MY-CU to PanTilt door

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	70m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	230'	330'

- IE-8MD to audio door station

Diameter	0.65mm	0.8mm	1.0mm
Distance	150m	230m	360m
AWG	22AWG	20AWG	18AWG
Distance	500'	750'	1,180'

- MY-CU to farthest MYH-CU (2 monitors)

Diameter	0.65mm	0.8mm	1.0mm
Distance	35m	50m	75m
AWG	22AWG	20AWG	18AWG
Distance	115'	160'	250'

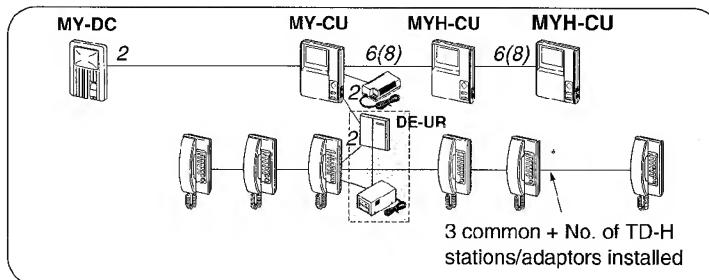
- Two farthest stations (any pair)

Diameter	0.65mm	0.8mm	1.0mm
Distance	75m	120m	190m
AWG	22AWG	20AWG	18AWG
Distance	250'	380'	630'

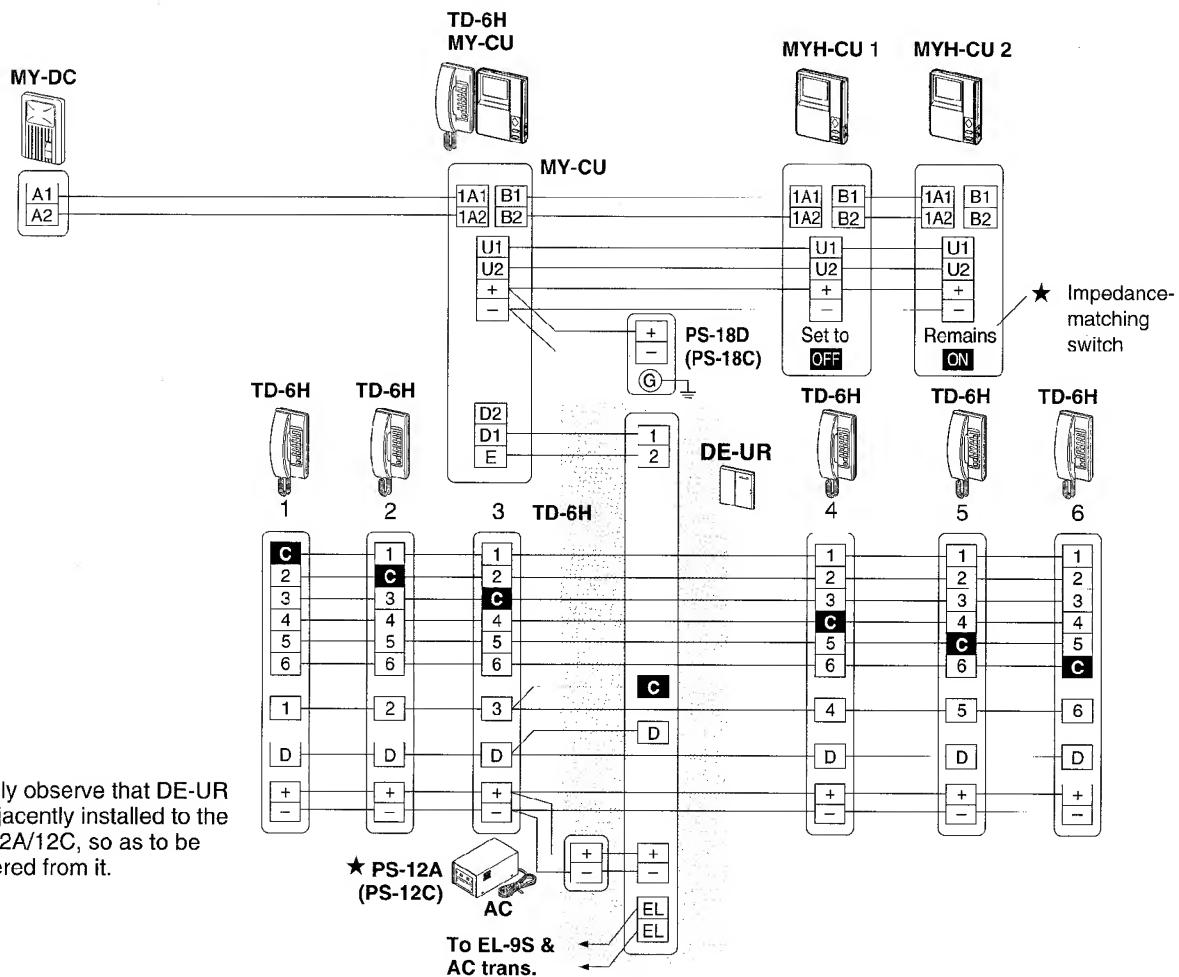
- MY-CU/IE-8MD to power supply PS-18D(C)

Diameter	1.0mm	AWG	18AWG
Distance	5m	Distance	16'

■ PanTilt video integration to TD-H/A or B



The DE-UR adaptor connects MY-CU system in the middle point of TD-H/A or B installation.



★ Strictly observe that DE-UR is adjacently installed to the PS-12A/12C, so as to be powered from it.

■ Wiring distance

• From DE-UR to power supply

Diameter	0.65mm	0.8mm	1.0mm
Distance	10m	15m	20m
AWG	22AWG	20AWG	18AWG
Distance	30'	50'	45'

• From MY-CU to power supply

Diameter	1.0mm
Distance	5m
AWG	18AWG
Distance	16'

• From MY-CU to PanTilt door MY-DC

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	70m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	230'	330'

• Between TD-H intercoms (any pair)

Diameter	0.65mm	0.8mm	1.0mm
Distance	650m	1,000m	1,500m
AWG	22AWG	20AWG	18AWG
Distance	2,000'	3,000'	4,900'

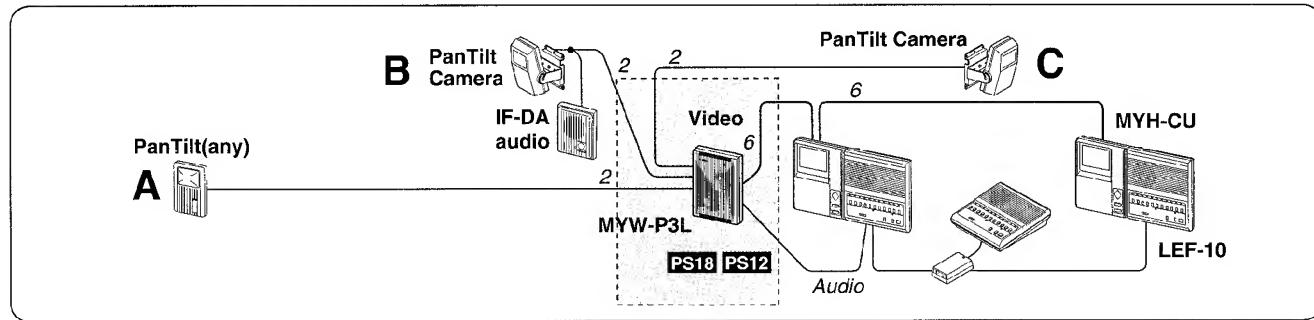
• From MY-CU to MYH-CU #1 (2 monitors)

Diameter	0.65mm	0.8mm	1.0mm
Distance	35m	50m	75m
AWG	22AWG	20AWG	18AWG
Distance	115'	160'	250'

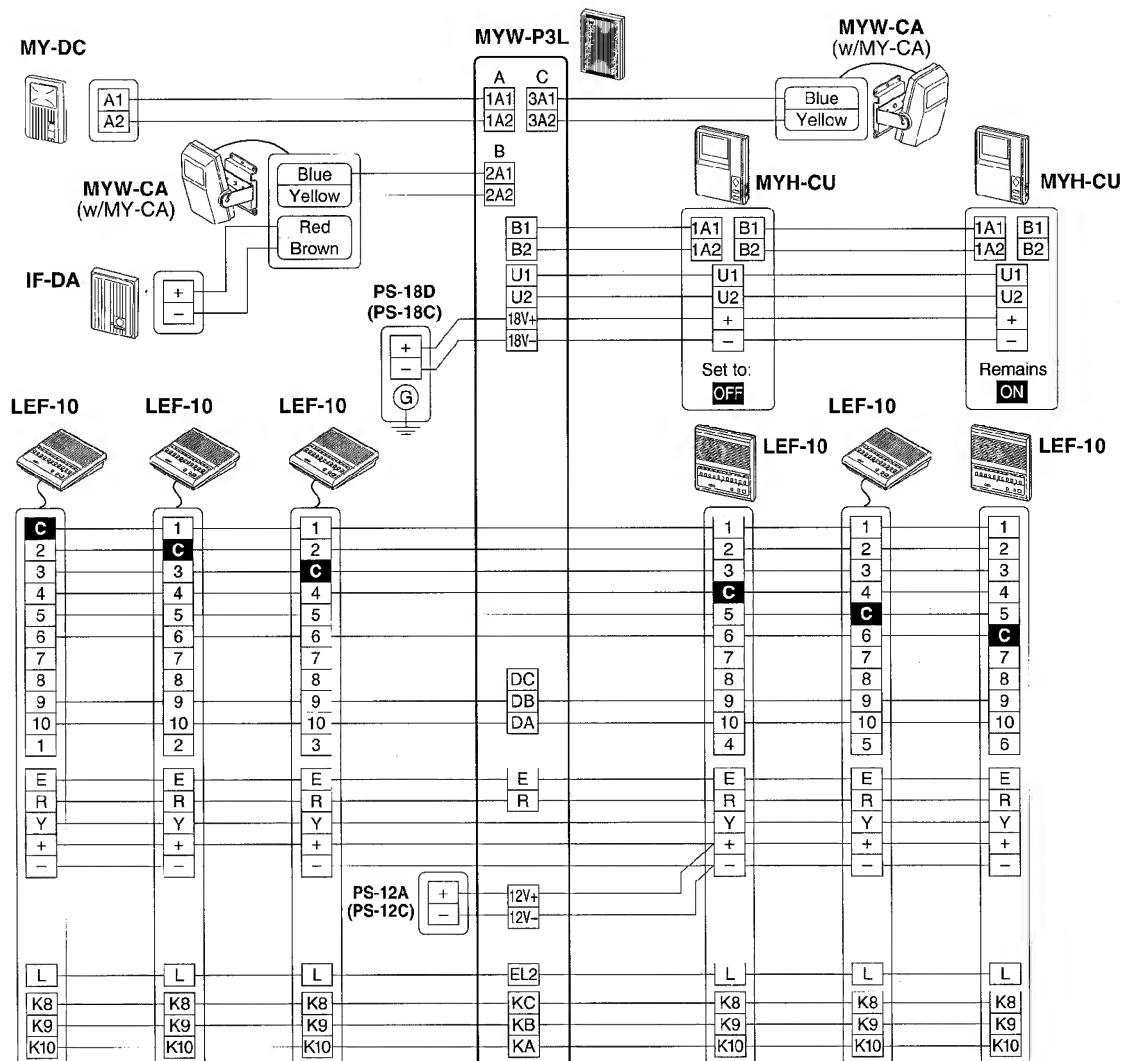
• From MY-CU to MYH-CU #2 (3 monitors)

Diameter	0.65mm	0.8mm	1.0mm
Distance	17m	25m	45m
AWG	22AWG	20AWG	18AWG
Distance	55'	80'	145'

■ LEFT-10 3-PanTilt entry system



MYW-P3L provides LEF-10 system with max. 3 PanTilt video doors, locating MYH-CU monitor 1 or 2 max. 75m, 250' away. The door camera can either be PanTilt door MY-DC, etc., MY-CA camera in MYW-A overhead enclosure, with audio IF-DA or camera alone. Locate MYW-P3L adaptor in the middle point of LEF-system together with 2 power supplies, audio and video.



■ Wiring distance

- From MYW-P3L to 2 power supplies
- From MYW-P3L to PanTilt camera (any)
- From MYW-P3L to farthest MYH-CU monitor (1 or 2-monitor)

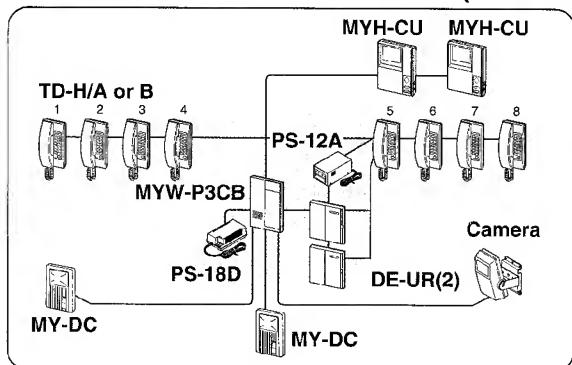
Diameter	1.0mm
Distance	5m
AWG	18AWG
Distance	16'

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	70m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	230'	330'

Diameter	0.65mm	0.8mm	1.0mm
Distance	35m	50m	75m
AWG	22AWG	20AWG	18AWG
Distance	115'	150'	250'

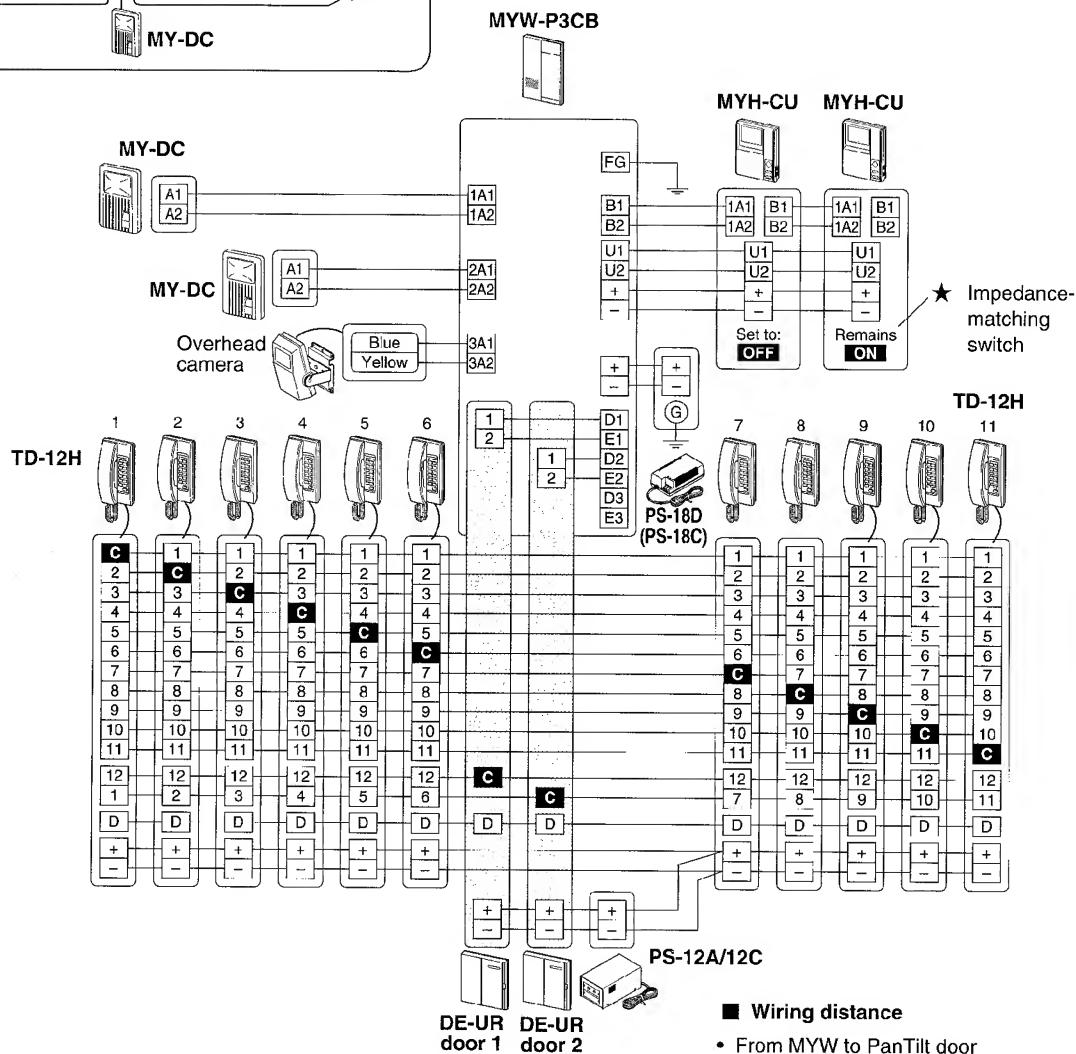
★ For 2-monitor system only, double wires on +, - terminals between MYW-P3L and MYH-CU's.

■ MY-CU with 3 PanTilt cameras (w/ MYW-P3CB)

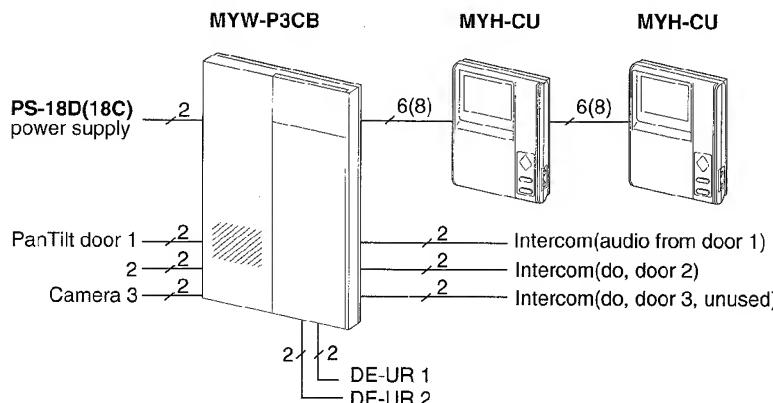


This is an expanded MY-CU system that includes max. 3 PanTilt cameras. Intercom can be either IE Series or TD-H/A or B.

- ★ Locate MYW-P3CB and power supplies in the middle point of using intercom system.



■ Wiring



■ Wiring distance

- From MYW to PanTilt door

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	70m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	230'	330'

- From MYW to farthest MYH-CU monitor (1 or 2-monitor)

Diameter	0.65mm	0.8mm	1.0mm
Distance	35m	50m	75m
AWG	22AWG	20AWG	18AWG
Distance	115'	150'	250'

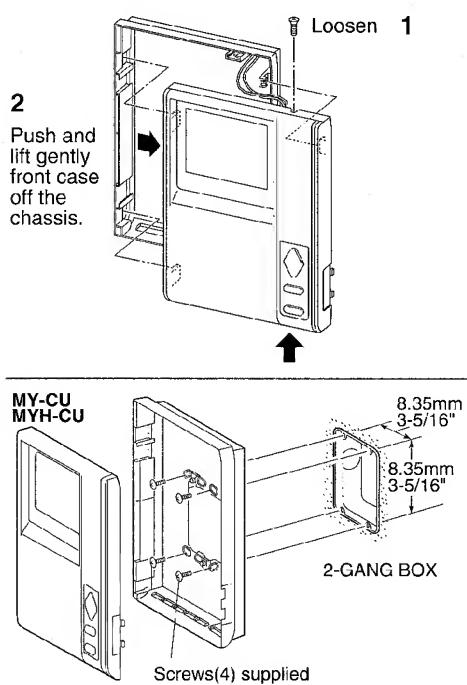
★ For 2-monitor system only, double wires on +, - terminals between MYW-P3CB and MYH-CU's.

- From MYW to PS-18D(18C)

Diameter	1.0mm	AWG	18AWG
Distance	5m	Distance	16'

5 MOUNTING

■ Mounting MY-CU and MYH-CU



To mount the MY(H)-CU monitor, separate the terminals-mounted chassis from front case.

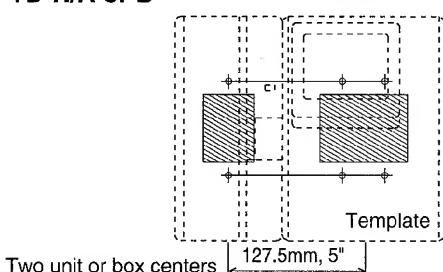
1. Loosen a screw on top of front case.
Press on bottom, right hand, and the front case slightly moves up.
2. Then, press on center of left side, which unlocks from chassis.
3. Lift gently front case, then it separates.
4. Disconnect video-monitor. Pull off the holder and set monitor aside.
5. Attach chassis to wall at 4 points.
6. Make wire terminations directly on 6 screw terminals.
7. On MY-CU only, wire with jumpers on audio terminals D1, D2 & E.
8. Pin the holder, reconnect and mount front case, justly aligning to lock.

★ Do not connect any wires at any other point than on terminals.

■ Mounting with intercom

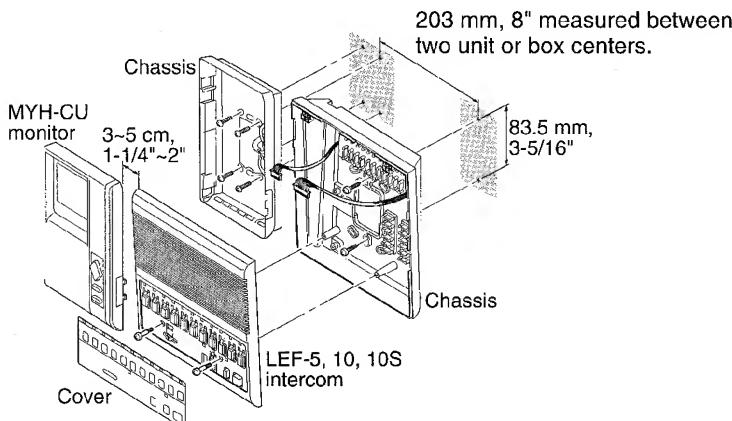
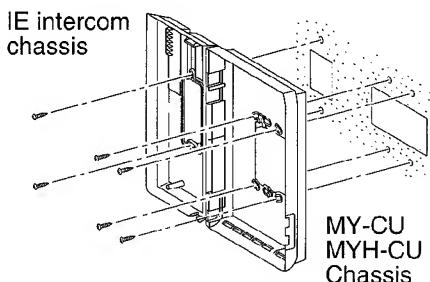
- For IE-1GD(U),
IE-2AD(U)
or TD-H/A or B

Attach template supplied to wall.



Before actually mounting the unit, attach the supplied template to wall. For MY-CU/IE-8MD combination, attach two chassis to wall. First, mount the intercom chassis (or bracket) to wall or single-gang box, and MY-monitor chassis can adjustably be mounted to its right side.

- For IE-8MD and IE-8HD



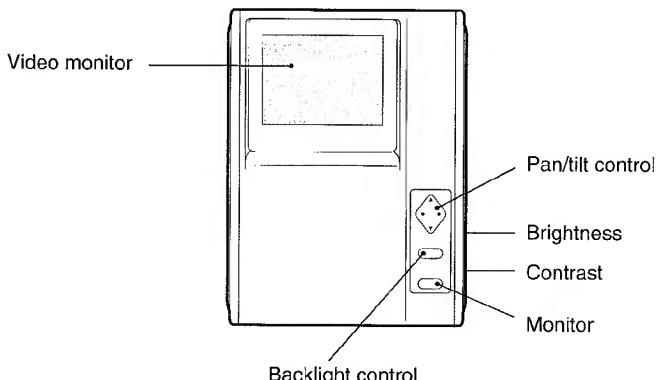
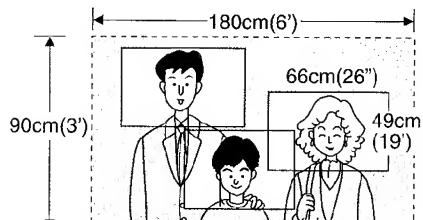
- For MYH-CU and LEF-5, 10, 10S

Mount MYH-CU to the left of LEF-5, 10, 10S intercom, keeping a space of 3 ~ 5 cm (1-1/4" ~ 2") for brightness/contrast adjustment.

6 OPERATIONS on MY-CU & MYH-CU

■ MY-DC, DG image viewing area

■ : when camera is panned and tilted fully
 □ : when camera is in still position.



■ Pan/tilt control pad



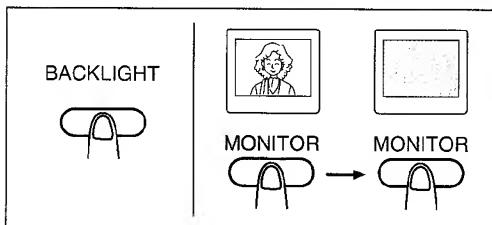
Door camera
tilts down



Door camera
pans to right

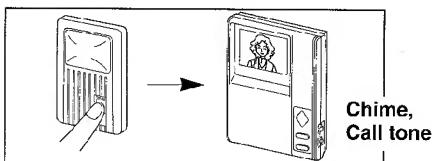
When an image of entry is on the monitor, move door camera up or down, side to side. Press on each edge of diamond-shaped pad, and door camera is panned and tilted to view max. 90cm high × 180cm wide (3' H × 6' W) on the monitor screen.

■ Backlight control & Monitor buttons

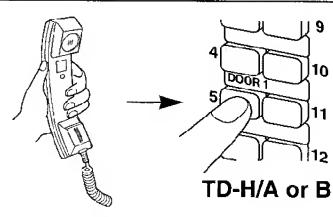


Backlight control button literally adjusts to brighten image of entry strongly backlit or when the entrance area is dim day or night. **Monitor** button views image of entry handsfree for 2-1/2 minutes (approx.). Press "Monitor" to turn off, or to view image of 2nd and 3rd entry.

■ PanTilt door station call, monitor-activating



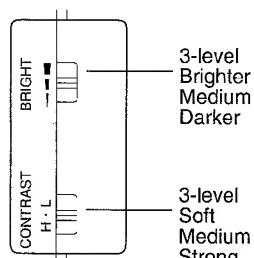
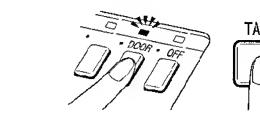
When a PanTilt door station has called, it turns on MY-CU and MYH-CU sub-monitor(s). The image is kept on for approx. 45 seconds.



Answering station operates as follows;

- On IE-1GD(U), IE-2AD(U) & IE-8MD; Simply pick up, seeing the image.
- On TD-(3, 6, 12, 24) H/A or B; Pick up and select a # button assigned.
- On LEF-(5, 10, 10S); Select a # button assigned, putting the station to listening mode. Depress Talk button and make a reply.

The image auto-shuts off in 2-1/2 minutes (approx.). Press Monitor button to resume.



■ Brightness & contrast controls

Each brightness and contrast are 3-level adjustable. To view dim entry area, put contrast (lower switch) to bottom H position, and slide down to decrease brightness.

7 BEFORE ASKING FOR REPAIR

- ★ In case the system does not provide a satisfactory performance, possible causes may be; Unplugged? Disconnected wire? Shorted wire? Consult the dealer or distributor that you purchased the product from.
- ★ Refrain from spraying water at the door station directly, regardless that the unit is designed to be weather-resistant.
- ★ Clean your MY-CU equipment by a soft cloth dampened with neutral household cleanser.
- ★ When the temperature outside lowers rapidly (after rain, etc.), the camera lens may be fogged and offer a dim image at the video monitor. This is not a malfunction, and will return to normal shortly.

8 SPECIFICATIONS

Power source DC 18V on MY-CU
Use a PS-18D power supply (PS-18C in North America).

Current consumption

System	MY-CU	MYH-CU	3-monitor
Max.	0.9A	0.4A	1.7A
Standby	0.12A	0A	0.12A

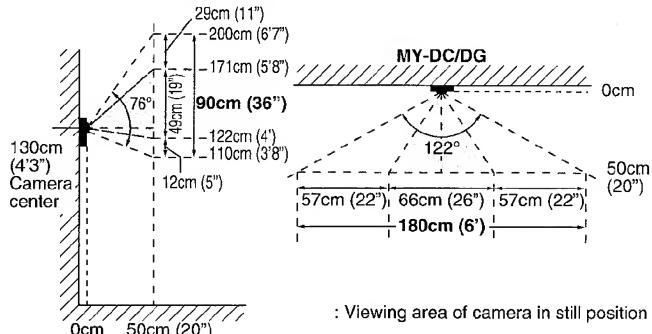
Video monitor 4" direct view flat CRT

Scanning line 525 lines

Pan/Tilt door capacity

1 door	IE-1GD(U), IE-2AD(U), IE-8MD, TD-H/A or B, MYW-P1L (LEF)
2 doors	MYW-P3CB (for IE, TD-H/A or B)
3 doors	MYW-P3L (LEF)

■ Pan/tilt viewing area shown by dotted line



Wiring Use 6 or 8-conductor (non-twisted) cable between monitors with no extra wires nor reconnections.

• To Pantilt door MY-DC MY-CU 2 cond. (parallel)	• 2 monitors MY-CU MYH-CU 6	• 3 monitors MY-CU MYH-CU MYH-CU 6 6 6	• 3 monitors MY-CU MYH-CU MYH-CU 8 8 8																																																
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* Wires on each +, - are doubled.

Dimensions (H x W x D) 210 mm x 155 mm x 50 mm. 8-1/4" H x 6-1/8" W x 2" D

Weight (approx.) MY-CU 1.0 kg (2.20 lbs.) MYH-CU 0.9 kg (1.98 lbs.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

WARRANTY

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of two years after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty. This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory. This warranty does not cover batteries or damage caused by batteries used in connection with the product. This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

Aiphone Co., Ltd., Nagoya, Japan
Aiphone Corporation, Bellevue, WA, USA

MY-CU-I(E) 0595D

COMMUNICATION SYSTEMS
AIPHONE
HOME, BUSINESS, INDUSTRY.
Printed in Japan (E)